

ABSTRACT OF THE DISCLOSURE

The invention is intended to simplify a default mechanism of a throttle valve opening and closing device for the purpose of improving mountability of the device to a vehicle. When a motor generate no driving forces, a throttle valve is held in a position (1) by a return spring. In this position, gaps are formed between the throttle valve and a wall surface of an intake passage. Spherical recesses are formed in parts of the wall surface of the intake passage. In a position (2) where the throttle valve is opposed to the spherical recesses, the gaps are minimized in an operating range of the throttle valve.